

Please amend the application as follows:

In the Claims

Please amend Claims 1-7, 12, 13, 17, 19, 37, 39 and 41. Amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (pages i - iii).

- B1
1. (Amended) Purified human cartilage oligomeric matrix protein prepared by the method comprising:
 - a) introducing DNA encoding human cartilage oligomeric matrix protein into cells, thereby producing cells expressing human cartilage oligomeric matrix protein;
 - b) culturing the cells in a culture medium under conditions suitable for expressing the human cartilage oligomeric matrix protein, thereby producing expressed human cartilage oligomeric matrix protein; and
 - c) purifying the human cartilage oligomeric matrix protein in the presence of calcium.
 2. (Amended) The purified human cartilage oligomeric matrix protein of claim 1 wherein the human cartilage oligomeric matrix protein is purified under calcium-replete conditions.
 3. (Amended) The purified human cartilage oligomeric matrix protein of claim 1 wherein the cells in step b) are cultured in a calcium-replete culture medium.
 4. (Amended) The purified human cartilage oligomeric matrix protein of claim 2 wherein the calcium is present at millimolar levels when the human cartilage oligomeric matrix protein is purified.
 5. (Amended) The purified human cartilage oligomeric matrix protein of claim 1 wherein the human cartilage oligomeric matrix protein is purified in a solution characterized by a calcium concentration of at least 300 μM .

B1
6. (Amended) The purified human cartilage oligomeric matrix protein of claim 1 wherein the human cartilage oligomeric matrix protein is expressed and purified in a solution characterized by a calcium concentration of at least 300 μ M.

7. (Amended) The purified human cartilage oligomeric matrix protein of claim 1 wherein the cells expressing human cartilage oligomeric matrix protein are produced by introducing into cells DNA encoding full length human cartilage oligomeric matrix protein.

B2 Sub E1
12. (Amended) Purified human cartilage oligomeric matrix protein which digests into bands of 50 kDa and 55 kDa when cleaved by trypsin.

13. (Amended) Purified human cartilage oligomeric matrix protein which digests into bands of 62 kDa and 67 kDa when cleaved by trypsin.

B3
17. (Amended) An ELISA kit comprising the human cartilage oligomeric matrix protein of claim 1.

B4 FACS
19. (Amended) An ELISA kit comprising the human cartilage oligomeric matrix protein produced by the method of claim 8.

B5
37. (Amended) A composition comprising purified cartilage oligomeric matrix protein and a biological matrix, wherein the matrix comprises at least one material selected from the group consisting of: treated cartilage and bone matrices, collagens, hyaluronan, fibrin gels, carbon fibers, porous polylactic acid, type I collagen gel and type II collagen gel and purified cartilage oligomeric matrix protein.

B6
39. (Amended) The composition of claim 37 wherein the cartilage oligomeric matrix protein is bound to a differentiation agent.